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STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314				RAVETTI, DANTE
ART UNIT		PAPER NUMBER		
3685				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[iplaw@stites.com](mailto:iplaw@stites.com)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/574,808	JEAL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DANTE RAVETTI	3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 August 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-130 is/are pending in the application.  
 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) See Continuation Sheet is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 05 April 2006 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 1,3,4,8-10,13-16,18,21,24,26,28,29,35,40-51,54,55,59,60,62-65,67,70,73,75,77,78,84 and 89-129.

Continuation of Disposition of Claims: Claims rejected are 2,5-7,11,12,17,19,20,22,23,25,27,30-34,36-39,52,53,56-58,61,66,68,69,71,72,74,76,79-83,85-88 and 130.

## **DETAILED ACTION**

### ***Acknowledgements***

1. This communication is in response to the Request for Continued Examination of Application No. 10/574,808 filed on 23 August 2010.
2. Claims 101-129 have been withdrawn by the Applicant.
3. Claims 1, 3-4, 8-10, 13-16, 18, 21, 24, 26, 28-29, 35, 40-51, 54-55, 59-60, 62-65, 67, 70, 73, 75, 77-78, 84 and 89-100 have been cancelled by the Applicant.
4. Claims 2, 5-7, 11-12, 17, 19-20, 22-23, 25, 27, 30-34, 36-39, 52-53, 56-58, 61, 66, 68-69, 71-72, 74, 76, 79-83, 85-88 and 130 are currently pending and have been fully examined.
5. For the purpose of applying the prior art, PreGrant Publications will be referred to using a four digit number within square brackets, e.g. [0001].

### ***Examiner's Comments/Remarks***

6. Applicant's response, filed on 23 August 2010, has fully be considered, but are moot in light of new grounds of rejections necessitated by Applicant's newly added limitations.

As to claim 103, Applicant recites, "...apparatus if a match is...." The MPEP interprets claim limitations that contain "if, may, might, can, when and could" statement(s), as optional language. As matter of linguistic precision, optional claim elements do not narrow claim limitations, since they can always be omitted.<sup>1</sup> Language

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<sup>1</sup> In re Johnston, 77 USPQ2d 1788 (Fed. Cir. 2006); As matter of linguistic precision, optional claim elements do not narrow claim, since they can always be omitted; in present case, elements of dependent claim directed to large diameter spirally formed pipe, which recite "further including that said wall may be smooth, corrugated, or profiled with

that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.<sup>2 3 4 5</sup>

Clauses (e.g. whereby, thereby, wherein) that merely states the result of the limitation(s) of a claim(s) does not limit the scope of the claim(s).<sup>6</sup> Therefore, as recited in claim 7, "...module is operable to authenticate the terminal in the mobile and/or cellular telecommunication system," for example, will not limit the scope of the claim.

Examiner would like to point out that the language of claim 5, describes, "non-functional descriptive material." For example, as to claim 5, Applicant recites, "...which the authentication storage device respective to that user corresponds to or simulates...." However, this is an example of non-functional descriptive material.<sup>7</sup>

Claim 56 contains similar language found in claim 5.

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increased dimensional proportions as pipe size is increased," do not narrow scope of claim compared to claims lacking those elements, since elements are stated in permissive form "may."

<sup>2</sup> MPEP §2106 II C; Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation;

<sup>3</sup> Intel Corp. v. Int'l Trade Comm'n, 20 USPQ2d 1161 (Fed. Cir. 1991); Because the language of claim 1 refers to "programmable selection means" and states "whereby when said alternate addressing mode is selected" (emphases added), the accused device, to be infringing, need only be capable of operating in the page mode. Contrary to GI/M's argument, actual page mode operation in the accused device is not required.

<sup>4</sup> In re Venezia, 189 USPQ 149 (C.C.P.A. 1976); However, we found that the claim did not positively recite any structural relationship between the two elements identified as [1] and [2], in its recitation of what may or may not occur. We concluded that the claim failed to comply with section 112, second paragraph, in "failing distinctly to claim what appellant in his brief insists is his actual invention."

<sup>5</sup> In re Collier, 158 USPQ 266 (CCPA 1968); It has been held that actions that may or may not be done is indefinite and does not distinguish the claim from the prior art;

<sup>6</sup> MPEP §2111.04[R-3]; MPEP §2106 II C; MPEP §2114;

<sup>7</sup> In re Gulack, 217 USPQ 401 (Fed. Cir. 1983), In re Ngai, 70 USPQ2d (Fed. Cir. 2004), In re Lowry, 32 USPQ2d 1031 (Fed. Cir. 1994); Where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability ....[T ]he critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate;

In light of Applicants' choice to pursue method claims, Applicants are also reminded that functional recitations using the word "for," "configured to," or other functional terms<sup>8</sup> (e.g. see claim 7, which recites, "... wherein the smart card or subscriber identity module is operable to authenticate...") have been considered but are not given patentable weight<sup>9</sup> because they fail to add any structural limitations and are thereby regarded as intended use language. To be especially clear, all limitations have been considered; however, a recitation of the intended use in a method claim must result in a structural difference between the claimed product and the prior art in order to patentably distinguish the claimed product from the prior art. If the prior art structure is capable of performing the intended use, then it reads on the claimed limitation.<sup>10</sup> Unless expressly noted otherwise by the Examiner, the claim interpretation principles in this paragraph apply to all examined claims currently pending.

Claim 58 contains similar language found in claim 7.

Examiner would like to point out that the language of claim 11 describes, "non-functional descriptive material." For example, as to claim 11, Applicant recites, "...storage device is incorporated on a data carrier for data or software for use by that

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<sup>8</sup> MPEP §2106 II C;

<sup>9</sup> In re Gulack, 703 F. 2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983)(stating that although all limitations must be considered, not all limitations are entitled to patentable weight);

<sup>10</sup> In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) ("The manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself."); In re Otto, 136 USPQ 458, 459 (CCPA 1963); Ex parte Masham, 2 USPQ2d 1647 (1987); A recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform.  
See also MPEP §§ 2114 and 2115.

data processing apparatus." However, this is an example of non-functional descriptive material.<sup>11</sup>

Examiner would also like to point out that Official Notice was used in the previous office action mailed on 23 February 2010 to indicate that *predetermined authentication information stored by each authentication storage means corresponding to information which is used to authenticate a telecommunications terminal of that user in relation to the telecommunications system but the authentication process for authenticating the transaction by that user with the data processing apparatus not requiring use of that user's telecommunications terminal.*<sup>12</sup> Since Applicant has not attempted to traverse

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<sup>11</sup> In re Gulack, 217 USPQ 401 (Fed. Cir. 1983), In re Ngai, 70 USPQ2d (Fed. Cir. 2004), In re Lowry, 32 USPQ2d 1031 (Fed. Cir. 1994); Where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability ....[T ]he critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate;

- <sup>12</sup> **Rodriguez et al.**, (US 2003/0202661);[0014] In summary, embodiments of the invention provide for the distribution and management of authorization tokens (from a distribution entity 106) that allows a source server (upon successful authentication) to create a working key for encryption of a large video or data file. The process may also insert a small encrypted header in the file that can only be seen by the intended user with the proper authorization token and password. The key is discarded after the encryption process is completed and is never stored. The encrypted file may then travel securely to a destination server. The intended user at the destination server will need a corresponding authorization token (sent by the distribution entity 106) and associated password in order for the software agent on the server to successfully recreate the key for decryption. **The keys are created when the authorization token compares a user password (e.g., in a dongle), and file header for authentication.**

- [0015] During the transport of the video or data file, a second level of encryption may be applied to the file to ensure it is received by authorized recipients only. **Those systems with non-authorized receivers will drop the packets due to wrong authentication (e.g., a smart card may be used for such authentication).**
- [0051] FIGS. 4A and 4B illustrate a secure theater content distribution data flow. Referring to FIG. 4A, a studio/post-production facility (i.e., in a media content provider 102 and protection entity 104) prepares the content 110 for distribution to the distribution entity 106. As illustrated, digital media content 110 such as a movie is obtained from a digital source master 402. Using a studio token, a compression/encryption server 116 prepares (e.g., compresses and encrypts) the content 110. As used herein the studio token 404 may comprise a software code delivered to the studio/post production facility 102/104 (e.g., on a floppy disk). The compression/encryption server 116 authenticates the studio token 404 to determine if the studio token 404 received is the studio token 404 expected (i.e., whether the password in the studio token 404 is authentic/valid). In this regard, a variety of authentication techniques may be utilized to authenticate the studio token 404. For example, a dongle may be utilized to authenticate the studio token 404 (as described in more detail below with respect to a theater token). **Further, a password in the dongle may be used to authenticate a user. Alternatively, a stronger authentication mechanism (e.g., biometrics such as fingerprint, or retinal scan readers) may also be used to authenticate the user.**

this Official Notice statement, examiner is taking the common knowledge or well-known statement to be admitted prior art.<sup>13</sup>

Examiner would also like to point out that Official Notice was used in the previous office action mailed on 4 May 2009 to indicate that *incorporating an authentication storage means on a data carrier is old and well known in the art.* Since Applicant has not attempted to traverse this Official Notice statement, Examiner is taking the common knowledge or well-known statement to be admitted prior art.<sup>14</sup>

***Continued Examination Under 37 C.F.R.- §1.114***

7. A request for continued examination under 37 CFR §1.114, including the fee set forth in 37 CFR §1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR §1.114, and the fee set forth in 37 CFR §1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR §1.114. Applicant's submission filed on 23 August 2010 has been entered.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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<sup>13</sup> MPEP 2144.03 C;

<sup>14</sup> MPEP 2144.03 C;

Art Unit: 3685

9. Claims 2, 5-7, 11-12, 17, 19-20, 22-23, 25, 27, 30-34, 36-39, 52-53, 56-58, 61, 66, 68-69, 71, 72, 74, 76, 79, 80-83, 85, 86-88 and 103 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 52, Applicant recites, “generate transaction data related to the transaction;” however, in regards to “transaction data” Applicant’s Specification recites:

[0008] According to a another aspect of the invention, there is provided a method of facilitating transactions between a plurality of users registered with an authentication system and plurality of product or service providers, the method including: [0009] providing each user with authentication storage means storing predetermined authentication information, each authentication storage means being coupleable to data processing apparatus for data exchange therewith; [0010] generating in response to a request, made using data processing apparatus, from a user to a product or service provider a **transaction request data packet including data indicative of the identity of the user and the identity of the product or service provider**; [0011] transmitting the transaction request data packet to the authentication system via the data processing apparatus;

[0012] analysing in the authentication system the transaction request **data packet and extracting therefrom the identity of the user**;

Applicant’s Specification seems to be silent the “generation” of transaction data.

As to claim 103, Applicant recites, “generating, by the data processing apparatus of the entity using the supplied data, **transaction data** relating to the desired transaction of the one user;” however, in regards to “transaction data” Applicant’s Specification recites:

[0008] According to a another aspect of the invention, there is provided a method of facilitating transactions between a plurality of users registered with an authentication system and plurality of product or service providers, the method including: [0009]

providing each user with authentication storage means storing predetermined authentication information, each authentication storage means being coupleable to data processing apparatus for data exchange therewith; [0010] generating in response to a request, made using data processing apparatus, from a user to a product or service **provider a transaction request data packet including data indicative of the identity of the user and the identity of the product or service provider;** [0011] transmitting the transaction request data packet to the authentication system via the data processing apparatus;

[0012] analysing in the authentication system the transaction request **data packet and extracting therefrom the identity of the user;**

The Applicant's Specification seems to be silent Applicant's "transaction data." The Examiner interprets "**transaction data**" to be distinguishable from **user ID** information.

Claims 2, 5-7, 11-12, 17, 19-20, 22-23, 25, 27, 30-34, 36-39, 53, 56-58, 61, 66, 68-69, 71, 72, 74, 76, 79, 80-83, 85, 86-88 are also rejected for being dependent upon rejected claims 52 and 103.

#### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 2, 5-7, 11-12, 17, 19-20, 22-23, 25, 27, 30-34, 36-39, 52-53, 56-58, 61, 66, 68-69, 71-72, 74, 76, 79-83, 85-88 and 103 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 52, Applicant recites, "generate transaction data related to the transaction;" however, in regards to "transaction data" Applicant's Specification recites:

[0008] According to another aspect of the invention, there is provided a method of facilitating transactions between a plurality of users registered with an authentication system and plurality of product or service providers, the method including: [0009] providing each user with authentication storage means storing predetermined authentication information, each authentication storage means being coupleable to data processing apparatus for data exchange therewith; [0010] generating in response to a request, made using data processing apparatus, from a user to a product or service

**provider a transaction request data packet including data indicative of the identity of the user and the identity of the product or service provider;** [0011] transmitting the transaction request data packet to the authentication system via the data processing apparatus;

[0012] analysing in the authentication system the transaction request **data packet and extracting therefrom the identity of the user;**

Applicant's Specification seems to be silent the "generation" of transaction data.

It is unclear what "transaction data" is generated.<sup>15</sup> Therefore, the scope of the claim is not clear. One of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

As to claim 103, Applicant recites, "generating, by the data processing apparatus of the entity using the supplied data, **transaction data** relating to the desired transaction of the one user;" however, Applicant's Specification recites:

[0008] According to a another aspect of the invention, there is provided a method of facilitating transactions between a plurality of users registered with an authentication system and plurality of product or service providers, the method including: [0009] providing each user with authentication storage means storing predetermined authentication information, each authentication storage means being coupleable to data processing apparatus for data exchange therewith; [0010] generating in response to a request, made using data processing apparatus, from a user to a product or service **provider a transaction request data packet including data indicative of the identity of the user and the identity of the product or service provider;** [0011] transmitting the transaction request data packet to the authentication system via the data processing apparatus;

[0012] analysing in the authentication system the transaction request **data packet and extracting therefrom the identity of the user;**

In regards to "transaction data" it is not clear where this information is derived and acquired from (e.g. is the transaction data stored within the SIM card itself or is it information inputted by the user)?<sup>16</sup> Therefore, the scope of the claim is not clear. One

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<sup>15</sup> In re Zletz, 13 USPQ2d 1320 (Fed. Cir. 1989); An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed...

<sup>16</sup> In re Zletz, 13 USPQ2d 1320 (Fed. Cir. 1989); An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed...

of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

As to claim 17, Applicant recites, “including the step of operatively coupling the authentication storage device....” However, it is not clear what is actually performing the coupling or how it is being accomplished; therefore, the scope of the claim is not clear. One of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

As to claim 17, Applicant recites, “...authentication storage device for communication over a carrier....” However, in regards to “a carrier,” Applicant's specification recites:

[0064] In an alternative arrangement, a data carrier may be provided with means for storing predetermined information such as in one of the forms described above--that is, a SIM or (more probably) software simulating a SIM. The simulated SIM is associated with data stored on the data carrier. The data carrier may, for example, be a DVD or CD ROM or some other similar data carrier, and the data thereon may be software or a suite of software.

Therefore, it is not clear what is meant by “over a carrier” (e.g. over a DVD)?<sup>17</sup> Therefore, the scope of the claim is not clear. One of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

As to claim 52, Applicant recites, “...with the data processing apparatus not requiring use of that user's telecommunications terminal.” However, the scope of the claim is not clear. For example, does the Applicant infer that no information is

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<sup>17</sup> In re Zletz, 13 USPQ2d 1320 (Fed. Cir. 1989); An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed...

received from the user's telecommunications terminal? The appropriate correction is required.

Claims 2, 5-7, 11-12, 17, 19-20, 22-23, 25, 27, 30-34, 36-39, 53, 56-58, 61, 66, 68-69, 71, 72, 74, 76, 79, 80-83, 85 and 86-88 are also rejected for being dependent upon rejected claims 52 and 103.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 2, 5-7, 11-12, 17, 30-31, 36-39, 52-53, 56-58, 61, 66, 79-80, 85-88 and 130 are rejected under 35 U.S.C. §103(a) as being unpatentable over Malinen et al., (US 2003/0028763) ("Malinen") and in further view of Chappuis (US 2003/0171993) ("Chappuis").

**As to claim 130:**

For purposes of examination the claim is being interpreted as follows that Malinen teaches substantially as claimed:

storing, on at least one authentication storage device of an authenticator of a telecommunications system, selected ones of a plurality of respective predetermined authentication information of each respective ones of the plurality of users, the respective predetermined authentication information corresponding to an actual authenticating information of a mechanism provided in a telecommunications terminal of each respective user which telecommunications terminal is associated with the telecommunications system ([0009], [0067],

[0079], [0084]);

initiating by one user a desired transaction with the entity, said initiating step including the steps of establishing a communication between a transaction manager of the one user and a data processing apparatus of the entity and supplying of data by the user to the data processing apparatus of the entity ([0009], [0067], [0079], [0084], Figure 10);

authenticating the one user to the data processing apparatus of the entity before completing the transaction, said authenticating step including the steps of establishing a connection, via a common telecommunications system, between the data processing apparatus of the entity and the authentication storage device of the authenticator having the predetermined authentication information of the one user, implementing the transaction manager of the user by the data processing apparatus of the entity,...between the data processing apparatus of the entity and the telecommunications system, and transmitting the actual authenticating information of the telecommunications terminal of the user to the authenticator, said transmitting step not requiring use of the telecommunications terminal of the user (Abstract, [0006], [0009], [0023], [0081], [0083]-[0084], [0011], [0076], [0080], [0083], [0085]-[0086], [0118], [0130]-[0131], [0162], [0180]-[0181], [0200], Figures 2, 8-10);

comparing the predetermined authentication information of the authentication storage device with the actual authenticating information by the authenticator to determine if there is a match, and communicating a match to the transaction manager ([0011], [0086], [0094], [0145], [0205], [0215], [0237], Claim 16, Figure 10);

completing the desired transaction of the one user by the data processing apparatus if a match is communicated to the transaction manager ([0011], [0086], [0094], [0145], [0205], [0215], [0237], Claim 16, Figure 10);

Malinen does not expressly teach:

generating, by the data processing apparatus of the entity using the supplied data, transaction data relating to the desired transaction of the one user;

said implementing step including the step of transmitting the transaction data;

However, Chappuis expressly teaches:

generating, by the data processing apparatus of the entity using the supplied data, transaction data relating to the desired transaction of the one user ([0108],

[0167], [0189], [0211], [0249]);

said implementing step including the step of transmitting the transaction data ([0108], [0167], [0189], [0211], [0249]);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Malinen* to include the features of *Chappuis* because in order to process a transaction a plurality of different types of information may be used to process such transaction.

**As to claims 2 and 53:**

*Malinen* expressly teaches:

in which the predetermined authentication information stored by each authentication storage device corresponds to information which is used to authenticate a user of that authentication storage device in relation to the telecommunications system ([0009], [0067], [0079], [0084]);

**As to claims 5 and 56:**

*Malinen* expressly teaches:

wherein each user is authenticated in the telecommunications system by a smart card or subscriber identity module, and in which the authentication storage device respective to that user corresponds to or simulates the smart card for that user ([0024], [0067], [0074], [0080], [0084]).

**As to claims 6 and 57:**

*Malinen* expressly teaches:

wherein the smart card or subscriber identity module...after the smart card or subscriber identity module is operable in a terminal usable in a mobile and/or cellular telecommunications system (Abstract, [0006], [0009], [0011], [0067], [0074], [0080]).

*Malinen* does not expressly teach:

authenticates the transaction;

However, *Chappuis* expressly teaches:

authenticates the transaction ([0019], [0023]-[0032], [0036], [0038]-[0039], [0051], [0053], [0101], [0104], [0107]-[0108], [0121]);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Malinen* to include the features of *Chappuis* because in order to process a transaction a plurality of different types of information may be used to process such transaction.

**As to claims 7 and 58:**

*Malinen* expressly teaches:

wherein the smart card or subscriber identity module is operable to authenticate the terminal in the mobile and/or cellular telecommunications system (Abstract, [0006], [0009], [0011], [0067], [0074], [0080]).

**As to claims 11:**

*Malinen* expressly teaches:

in which the authentication storage device is incorporated on a data carrier for data or software for use by that data processing apparatus ([0009], [0067], [0079], [0084], Figures 8-10);

**As to claims 12 and 61:**

*Malinen* expressly teaches:

in which the authentication step includes the steps of sending of a message and generating of a response dependent on the message and the predetermined information ([0011], [0062], [0074], [0081], [0085], [0088], Figures 3, 6, 10).

**As to claims 17 and 66:**

For purposes of examination the claim is being interpreted as follows that *Malinen* expressly teaches:

further including the step of operatively coupling the authentication storage device for communication over a carrier with the transaction manager ([0074], [0119], [0725]);

**As to claims 30 and 79:**

*Malinen* discloses as discussed above; however, *Malinen* does not expressly disclose:

wherein the data processing module of the carrier decrypts encrypted data received from the data processing module of the data processing apparatus.

However, *Chappuis* expressly teaches:

wherein the data processing module of the carrier decrypts encrypted data received from the data processing module of the data processing apparatus ([0041], [0048], Claim 23)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Malinen* to include the features of *Chappuis* because in order to keep data secure, encryption may be employed.

**As to claims 31 and 80:**

*Malinen* discloses as discussed above; however, *Malinen* does not expressly disclose:

wherein the data processing module of the carrier encrypts data transmitted to the data processing module of the data processing apparatus.

However, *Chappuis* expressly teaches:

wherein the data processing module of the carrier encrypts data transmitted to the data processing module of the data processing apparatus ([0041], [0048],

Claim 23);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Malinen* to include the features of *Chappuis* because in order to keep data secure, encryption may be employed.

**As to claims 36 and 85:**

*Malinen* expressly teaches:

including routing communications between the authentication storage device and the telecommunications system via the transaction manager ([0009], [0011], [0074]).

**As to claims 37 and 86:**

*Malinen* expressly teaches:

wherein the transaction manager is implemented by the data processing apparatus ([0009], [0011], [0074]).

**As to claims 38 and 87:**

*Malinen* expressly teaches:

wherein the transaction manager detects the operative coupling of the authentication storage device ([0080]-[0082], [0084]-[0085], Figure 1).

**As to claims 39 and 88:**

*Malinen* expressly teaches:

wherein the transaction manager transmits data...to the entity to which that transaction relates ([0084]-[0086], [0088], [0095]-[0097], [0101]-[0104]).

*Malinen* does not expressly teach:

relating to an authenticated transaction;

However, *Chappuis* expressly teaches:

relating to an authenticated transaction ([0019], [0023]-[0032], [0036], [0038]-[0039], [0051], [0053], [0101], [0104], [0107]-[0108], [0121]);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Malinen* to include the features of *Chappuis* because in order to process a transaction a plurality of different types of information may be used to process such transaction.

**As to claim 52:**

*Malinen* expressly teaches:

with a data processing apparatus (Abstract, [0005]-[0007], [0070]-[0074]);

a selected one of a plurality of authentication storage devices in operative association with the data processing apparatus, each said authentication storage device storing predetermined authentication information relating to the carrying out of the authentication (Abstract, [0006], [0009], [0011], [0016], [0067]); and

a common telecommunications system which is registerable with the plurality of the authentication storage devices ([0157], [0180]);

a communications link with the telecommunications system by which the authentication storage devices operatively associated with the data processing apparatus to carry out the authentication process (Abstract, [0006], [0009], [0011], [0016], [0076], [0079], Figure 8-10);

an authenticating device incorporated in the telecommunications system by which the authentication process is carried out and which involves the use of the predetermined authentication information respective to the user stored by the selected one authentication storage devices (Abstract, [0006]-[0007], [0009], [0011], [0023], [0070]-[0074]);

the data processing apparatus comprising at least a transaction manager through which communications between the data processing apparatus and the telecommunications system are transmitted and through which the predetermined authentication information is also transmitted between the authentication storage devices and the telecommunications system, the

transaction manager being implemented by the data processing apparatus (Abstract, [0006], [0009], [0011], [0016], [0076], [0079], Figure 8-10);

the predetermined authentication information being stored by each authentication storage device corresponding to information which is used to authenticate a telecommunications terminal of that user in relation to the telecommunications system but the authentication process for authenticating the transaction by that user with the data processing apparatus not requiring use of that user's telecommunications terminal ([0009], [0067], [0079], [0084]);

Malinen does not expressly teach:

the entity being operable to generate transaction data relating to the transaction;

However, Chappuis expressly teaches:

the entity being operable to generate transaction data relating to the transaction ([0108], [0167], [0189], [0211], [0249]);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Malinen to include the features of Chappuis because in order to process a transaction a plurality of different types of information may be used to process such transaction.

12. Claims 19-20, 22-23, 25, 27, 68-69, 71-72, 74 and 76 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Malinen/Chappuis and in view of Tayloe, (US 5,933,785) ("Tayloe").

**As to claims 19 and 68:**

The combination of Malinen/Chappuis discloses as discussed above; however, the combination of Malinen/Chappuis does not expressly teach:

wherein the carrier is operatively coupled to the data processing apparatus by a wireless link.

However, Tayloe expressly teaches:

wherein the carrier is operatively coupled to the data processing apparatus by a wireless link ((Col. 4, lines 45-65)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Malinen/Chappuis to include the features of Tayloe because having a carrier coupled to a apparatus via a wireless link provides for efficient and easy access to processing apparatus.

**As to claims 20 and 69:**

The combination of Malinen/Chappuis discloses as discussed above; however, the combination of Malinen/Chappuis does not expressly teach:

wherein the authentication storage device is removably coupled to the carrier.

However, Tayloe expressly teaches:

wherein the authentication storage device is removably coupled to the carrier (Abstract, (Col. 1, lines 14-21), (Col. 2, lines 59-67),(Col. 4, lines 1-17)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Malinen/Chappuis to include the features of Tayloe because it may be desired to interchange authentication storage means with different types of carriers.

**As to claims 22 and 71:**

Malinen expressly teaches:

comprising the step of using said carrier to obtain user security data independently of the data processing apparatus, and analysing the user security data for determining whether to allow access to the predetermined

information([0009], [0067], [0079], [0084]);

**As to claims 23 and 72:**

The combination of *Malinen/Chappuis* discloses as discussed above; however, the combination of *Malinen/Chappuis* does not expressly teach:

wherein the security data is obtained by alphanumeric data entry.

However, *Tayloe* expressly teaches:

wherein the security data is obtained by alphanumeric data entry ((Col. 3, lines 15-22), (Col. 5, lines 55-60), Figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of *Malinen/Chappuis* to include the features of *Tayloe* because alphanumeric data entry allows for a well known method of inputting data which provides access to control information.

**As to claims 25 and 74:**

The combination of *Malinen/Chappuis* discloses as discussed above; however, the combination of *Malinen/Chappuis* does not expressly teach:

wherein the user security data comprises a Personal Identification Number (PIN) and the analysing step compares the PIN obtained by the security data entry device with a PIN stored on the authentication storage device and only allows access to the predetermined information when the respective PINs match.

However, *Tayloe* expressly teaches:

wherein the user security data comprises a Personal Identification Number (PIN) and the analysing step compares the PIN obtained by the security data entry means with a PIN stored on the authentication storage means and only allows access to the predetermined information when the respective PINs match ((Col. 2, lines 59-67)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the combination of Malinen/Chappuis to include the features of Tayloe because it may be desirable to provide some type of security to ensure that only properly authorized user's have access to information on the SIM or smart card.

**As to claims 27 and 76:**

Malinen expressly teaches:

wherein communication with the data processing apparatus is controlled by a data processing module (Abstract, [0006]-[0007], [0009], [0011]).

13. Claims 32-34 and 81-83 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Malinen/Chappuis/Tayloe and in further view of Schneier et al., (US 2003/0177347) ("Schneier").

**As to claims 32 and 81:**

The combination of Malinen/Chappuis/Tayloe discloses as discussed above; however, the combination of Malinen/Chappuis/Tayloe does not expressly disclose:

wherein the respective data processing modules comprise a key for allowing encryption and/or decryption of data.

However, Schneier expressly teaches:

wherein the respective data processing modules comprise a key for allowing encryption and/or decryption of data ([0138]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Malinen/Chappuis/Tayloe to include the features of Schneier because it may be desirable to maintain data security by ensuring a decryption/encryption process is being employed between device communications with

each other.

**As to claims 33 and 82:**

The combination of Malinen/Chappuis/Tayloe discloses as discussed above; however, the combination of Malinen/Chappuis/Tayloe does not expressly disclose:

wherein the key comprises a shared secret key for each of the respective data processing modules.

However, Schneier expressly teaches:

wherein the key comprises a shared secret key for each of the respective data processing modules ([0212]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Malinen/Chappuis/Tayloe to include the features of Schneier because it may be desirable to maintain data security by ensuring a decryption/encryption process is being employed between device communications with each other.

**As to claims 34 and 83:**

Malinen expressly teaches:

wherein the carrier is operatively coupled to a plurality of authentication storage means for respectively enabling the said authentication process and one or more other authentication processes ([0003], [0024], [0074]);

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Mr. Dante Ravetti whose telephone number is (571) 270-3609. The examiner can normally be reached on Monday – Thursday 9:00am-5:00pm.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Calvin Hewitt may be reached at (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is (571) 270-4609.

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/Dante Ravetti/  
Examiner, Art Unit 3685  
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